

## Technical Support



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Technical help is available: Monday - Friday from 07:00 - 19:00 (GMT)  
Saturday from 09:00 - 13:00 (GMT)

Documentation on all Paxton products can be found on our website - <http://www.paxton.co.uk/>

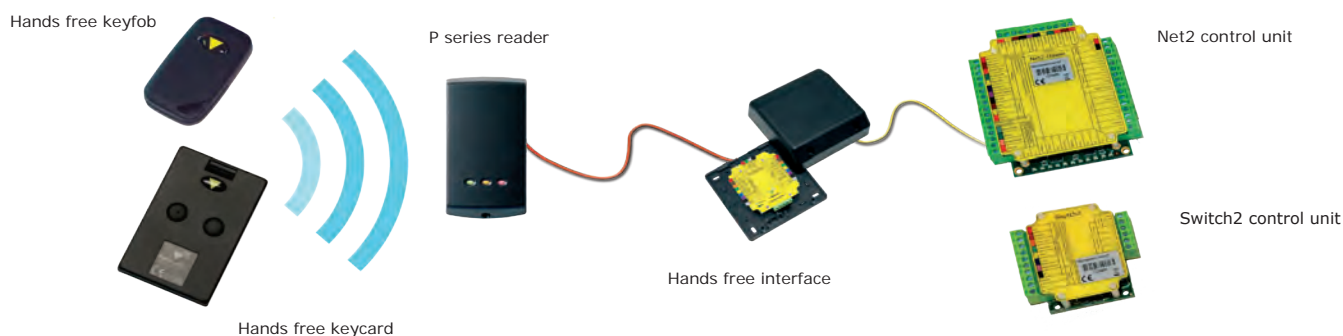
## What is hands free?

The hands free system increases the effective read range of a standard Paxton P or KP series reader. Standard tokens use the readers radio field to power the token but hands free tokens have a battery and so only require a much weaker signal to be activated.

The system comprises of a compatible reader (see read range table), a hands free interface and hands free tokens (keycard or keyfob). The system operates by using the reader to wake up the battery powered token which then communicates with the interface and its long range receiver aerial.

Existing P and KP readers can be used without modification. The hands free interface takes its power from the control unit and therefore does not require a power supply.

Hands free tokens also include a standard PROXIMITY ID chip and can therefore be presented to any compatible proximity reader whether they are using the hands free interface or not.



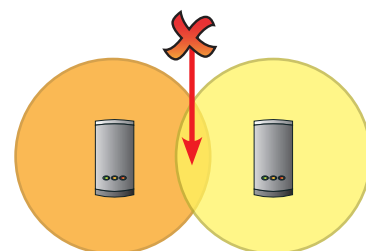
## Before you install

### Positioning readers

Hands free readers should be positioned so that their transmission fields do not overlap. (see table on back page for typical hands free ranges)

For example, the minimum distance between a P200 and a P50 reader should be 3.6 m (P200 hands free range = 2.5 m + P50 hands free range = 1.1 m)

For optimum keyfob battery life please choose your reader location carefully to avoid placing it within hands free range of work stations, rest or smoking areas.



### Read in, read out

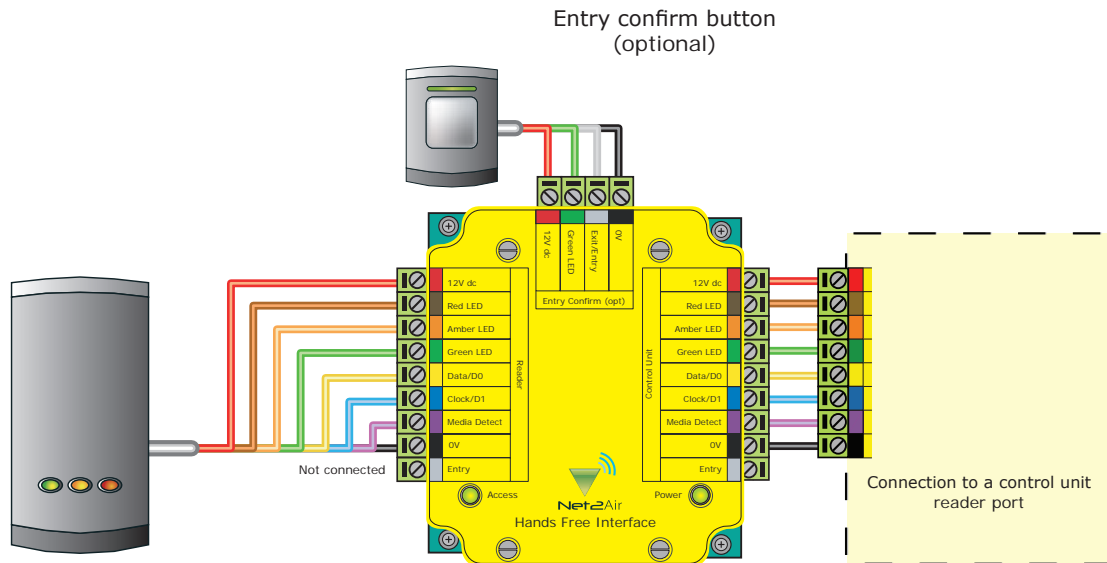
When using in and out readers, users may be picked up by both readers as they move through the door which will reduce the reliability of any roll call or anti-passback application. Ensure that sufficient spacing is provided between these readers for optimum range and reliability.

### Positioning the interface

The interface should be positioned as close as practical to the reader. A distance from interface to reader of 10 to 15 meters can be achieved but wireless technology is susceptible to environmental factors and so if problems are experienced it may be necessary to move the interface closer to the reader.

The hands free interface should not be housed in a metal enclosure as it contains the main receiver aerial. Sticky feet allow the interface to be stuck to the ACU wiring label in a PSU plastic housing.

## Wiring



## Installation

No additional power supply is required for this installation. Power is supplied by the ACU reader port.

Complete the wiring between the P series reader, the hands free module and the ACU before powering up the ACU. This will ensure that the reader firmware is reconfigured for hands free operation.

### Cable extensions

Readers can be extended using Belden CR9540 10-core overall screened cable to a maximum of 100 metres.

### Firmware download

Hands free firmware for the P series reader will be downloaded from the interface to the reader as soon as it is powered up. This is indicated by flashing amber and red LED's on the reader. Once complete all LED's will be lit.

This may take up to 10 minutes to complete. Do NOT disconnect power during the firmware update.

If the firmware update is still taking place after 10 minutes then remove and then re-connect the ACU cable. Listen to the reader, the reader should NOT beep. If the reader beeps within approximately 10 seconds of power up it will not take the firmware update. Repeat the process until the reader does NOT 'beep' on power up. Then leave for 10 mins to allow the update to take place.

## Using an entry confirm button

Where more than one door interface can pick up the hands free token, a 'push to make' button can be used to select the required door. Where fitted, the LED on a confirm button will flash for 5 seconds after the hands free token has been recognised and must be pressed to unlock the door.

Once an entry confirm button has been fitted to the interface PCB, perform the following sequence:

1. Power down the interface board.
2. Power up the interface board.
3. Press and hold the entry confirm button for a minimum of 3 seconds within 60 seconds of power up.

To disable the use of the button, repeat the above sequence.